



Digi-Mantles

Digital heating and stirring

Digi-Mantles enable a flask of 250ml, 500ml or 1000ml capacity to be heated and stirred through precise electronic control. They have a modular design which allows heating cartridges of different sizes to be interchanged using the same OMCA digital controller as a base, which makes the Digi-Mantles a very cost-effective and space-saving option.

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OMCA Digi-Mantle

Digital heating and stirring mantle

Digi-Mantles enable a flask of 250ml, 500ml or 1000ml capacity to be stirred and heated up to an element temperature of 450°C through precise electronic control, giving an accurate measure of temperature and stirring. The modular design allows heating cartridges of different sizes to be interchanged using the same OMCA digital controller as a base, which makes the Digi-Mantles a very cost-effective option.

Heater Cartridge

The heater cartridge ensures that the temperature is uniformly distributed across the flask. Even with the element temperature at 450°C, the outside of the heater cartridge remains "cool-to-the-touch" due to a continuous air flow through ventilation slots beneath and around the rim of the case.

The heating cartridge comes in 3 sizes for heating flasks of 250ml (OMCA0250), 500ml (OMCA0500) and 1000ml (OMCA1000) capacity.

OMCA Controller

Used to control both temperature and stirring speed independently, the OMCA digital controller has a revolutionary CTC (Capacitance Touch Control) panel, which is both easy to read and use, and you can quickly set the required temperature and stir speed using the up/down arrows. The control panel has separate indicator lights for the power, heater and stirrer functions, along with a 2 x 16 digit display indicating the actual temperature from ambient to 450°C (max element temperature). Stirring speeds from 100 to 2000rpm are obtained by lightly touching the stirrer speed keys.

Temperature Control

Heating is controlled by a modern state of the art microprocessor, which displays the heat setting as a percentage of the total power. An optional PT100 temperature probe may be used to gauge the temperature of the flask contents more accurately; the temperature probe's heating is controlled via the temperature feedback circuit and the actual temperature is displayed. The temperature probe operates up to 250°C.

Key Features

- Same OMCA controller accommodates different capacity heating cartridges, ie. interchangeable design
- Round bottom flask capacity of between 250ml - 1000ml
- "Cool-to-the-touch" design
- Greater stirring stability and speeds from 100 to 2000rpm
- Controller with display menus and touch pad interface
- Indicator lights for power, stirrer and heater operation
- Support rod clamps



OMCA Digi-Mantle

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Improved Stirring

The OMCA digital controller and motor arrangement has recently been upgraded to allow for accurate low speed stirring control and higher stirring speeds. Uniform stirring is provided via a motorised rotating magnet assembly positioned to provide maximum flux linkage to rotate the stirrer bars in each reaction vessel.

Technical Information

Model	Digi-Mantle 250	Digi-Mantle 500	Digi-Mantle 1000
Catalogue number	OMCA0250*	OMCA0500*	OMCA1000*
Voltage	230V & 115V	230V & 115V	230V & 115V
Flask capacity	250ml	500ml	1000ml
Controlled block temperature	Ambient	Ambient	Ambient
Temperature range	Ambient to 450°C	Ambient to 450°C	Ambient to 450°C
Stir speed range, rpm	100 - 2000	100 - 2000	100 - 2000
Dimensions (d x w x h), mm	300 x 300 x 650	300 x 300 x 650	300 x 300 x 650
Shipping Weight, kg	3.1	3.1	3.1

Ordering Information

Model	Description
OMCA*	Digi-Mantle digital controller for temperature and stirring
OMCA0250*	Digi-Mantle heating cartridge kit (250ml capacity)
OMCA0500*	Digi-Mantle heating cartridge kit (500ml capacity)
OMCA1000*	Digi-Mantle heating cartridge kit (1000ml capacity)
AZ140940	Temperature probe (thermocouple)
OM0250	Replacement 250ml Digi-Mantle heater cartridge
OM0500	Replacement 500ml Digi-Mantle heater cartridge
OM1000	Replacement 1000ml Digi-Mantle heater cartridge

*Add suffixes: X1 for 115V; X6 for 230V with EU Plug